

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,000	05/30/2002	James Thomas Edward McDonnell	B-4458PCT 619452-2	6388
22879	7590 08/19/2004		EXAMINER	
	PACKARD COMPA	ADDY, ANTHONY S		
P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION			ART UNIT	PAPER NUMBER
FORT COL	FORT COLLINS, CO 80527-2400			
			DATE MAILED: 08/19/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	_					
	Application No.	Applicant(s)				
	10/032,000	MCDONNELL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Anthony S Addy	2681				
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet wit	th the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPI THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a re ply within the statutory minimum of thirty d will apply and will expire SIX (6) MONT te, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 30 to	May 2002.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 17 and 20-30 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>17 and 20-30</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/	or election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examin	er.					
10)⊠ The drawing(s) filed on 30 May 2002 is/are: a	10)⊠ The drawing(s) filed on <u>30 May 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the E	examiner. Note the attached	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 	nts have been received.					
 Copies of the certified copies of the price application from the International Burea 	•	received in this National Stage				
* See the attached detailed Office action for a list of the certified copies not received.						
,						
Attachment(s)						
1) Notice of References Cited (PTO-892)		ummary (PTO-413)				
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 7.)/Mail Date formal Patent Application (PTO-152) 				

Art Unit: 2681

DETAILED ACTION

Specification

- 1. The disclosure is objected to because of the following informalities:
 - Applicant should review the spacing between terms on page 9 (line 1) and page
 10 (line 1).
 - "location-determiningmethods" on page 4 (line 30) and page 5 (line 26) should be corrected to "location-determining methods".
 - "location-determiningmethod" on page 5, line 17 should be corrected to "location-determining method".
 - "location-determiningmeasurements are" on page 9, line 18 should be corrected to "location-determining measurements are".
 - "determinationcan" on page 9, line 17 should be corrected to "determination can".
 - "device 20" on page 13, line 31 should be corrected to "mobile device 80" as specified in Fig. 6 and on page 13, line 25.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20-24, 26-30

3. Claims 17, 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rangedahl et al., U.S. Patent Number 5,790,074 (hereafter Rangedahl), and

Application/Control Number: 10/032,000 Page 3

Art Unit: 2681

further in view of Hastings et al., U.S. Patent Number 6,370,629 (hereafter Hastings).

Regarding claim 17, Rangedahl teaches a service system (see col. 3, lines 17-20 and Fig. 1; where an automated location verification and authorization system is shown) for determining when an item of equipment is located at a location where particular functionality of the equipment is authorized (see col. 2, lines 5-15), the service system comprising: a communications sub-system for communicating with said equipment both to receive therefrom identity information (see col. 2, lines 12-15), and to return to the equipment enablement signals for enabling said particular functionality (see col. 4, lines 9-15); a location-obtaining arrangement for obtaining current-location data representing the current location of the equipment (see col. 4, lines 16-52); a store for storing in association with identity data, authorized-location data representing a predetermined authorized location or locality for operation of said particular functionality of the equipment (see col. 4, lines 5-8 and Fig. 1; where an authorization database 120 is shown); a data retrieval arrangement for using identity information received from the equipment via the communication sub-system to access the authorized-location data held in said store in respect of identity data matches the identity information (see col. 3, line 47 through col. 4, line 15). Rangedahl, however, does not specifically teach the equipment is authorized for use in accessing target data provided on a removable data carrier or in a received data file and a comparison arrangement for comparing the current-location data with the accessed authorized-location data whereby to generate a

Art Unit: 2681

location-match signal upon this comparison indicating that the equipment is currently located in said authorized location or locality.

Hastings, however, discloses a method of accessing information, which is stored on a portable computer-readable CD-ROM which serves as a data distribution media, may be controlled based on actual geographic position of a computer system on which the information is to be accessed and the time when it is to be accessed (see col. 2, line 66 through col. 3, line 4). Hastings, further, discloses a method of comparing the actual geographic position with a geographic region within which access to the stored information is authorized (see col. 1, lines 33-35 and Fig. 4; where step 460 compares actual geographic with a geographic position within which access to the stored information is authorized).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of controlling access to stored information based on geographic location as taught by Hastings, to the method and system of automated location verification and authorization of electronic devices of Rangedahl to include accessing target data provided on a removable data carrier or in a received data file and a comparison arrangement for comparing the current-location data with the accessed authorized-location data, thus allowing access to information stored on a removable data carrier or in a received data file, which serves as a data distribution media control based on an actual geographic position of a computer system on which the information is to be accessed, as taught by Hastings.

Art Unit: 2681

Regarding claim 20, Rangedahl teaches a control method for an automated system for determining the geographical location of an electric device, verifying whether it is authorized to operate in its present geographical location, and enabling its operation if the device resides in an authorized location (see col. 2, lines 4-8). The method involving testing a location condition by: (a) sending identity information identifying said target data from the equipment to a remote service system (see col. 5, lines 46-67); (b) using the identity information at the service system to retrieve authorized-location data that is associated with the target data and represents a predetermined authorized location or locality for operation of said particular functionality of the equipment in relation to the associated target data (see col. 6, lines 1-4 and col. 6, lines 20-24); (c) obtaining at the service system current-location data representing the current location of the equipment as determined by means other than the equipment (see col. 5, line 46 through col. 6, line 22); (d) comparing the current-location data with the authorizedlocation data and generating a location-match signal upon this comparison indicating that the equipment is currently located in said authorized location or locality (see col. 6, lines 20-24; where it does not specifically state a comparison of current-location data with the authorized-location data, but is inherent that to make a determination as to whether operation is allowed at the given geographical location, authorization grant function compares current-location data with location allowability data for currentlocation from the authorization database). Rangedahl, however, does not specifically teach equipment that is provided with particular functionality for using target data on a removable data carrier or in a received data file.

Art Unit: 2681

Hastings, however, discloses equipment that is provided with a particular functionality for using target data on a removable data carrier or in a received data file (see col. 1, lines 29-38 and col. 1 lines 43-57).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of controlling access to stored information based on geographic location as taught by Hastings, to the method and system of automated location verification and authorization of electronic devices of Rangedahl to include equipment that is provided with a particular functionality for using target data on a removable data carrier or in a received data file to access stored information files and each of these files having an associated geographic region within which access is permitted.

Regarding claim 21, Rangedahl in view of Hastings teaches all the limitations of claim 20. Rangedahl further teaches a method, wherein in step (c) the current location data is obtained by the service system from a location determining system separate from the equipment (see col. 5, lines 46-50).

Regarding claim 22, Rangedahl in view of Hastings teaches all the limitations of claim 21. Rangedahl further teaches a method, wherein the equipment communicates with the service system by a communications infrastructure comprising a cellular radio network (see col. 3, line 38-43), the location determining system using signals associated with the cellular radio network to determine the location of the equipment (see col. 7, lines 20-25), and the remote service system obtaining said current-location

data from the location determining system either directly or via the equipment (see col. 7, lines 26-35 and col. 7, lines 51-64).

Regarding claim 23, Rangedahl in view of Hastings teaches all the limitations of claim 20. Rangedahl further teaches a method, wherein the identity information is provided to the equipment along with the target data and is accessed by the equipment for sending to the service system in step (a) (see col. 5, lines 46-67).

Regarding claim 24, Rangedahl in view of Hastings teaches all the limitations of claim 20. Rangedahl further discloses a method, wherein the service system returns an enabling code to the equipment upon said first location condition and any other conditions set to be tested at the service system being satisfied (see col. 4, lines 9-14), the enabling code being used at the equipment to enable said functionality (see col. 4, lines 14-15).

Regarding claim 26, Rangedahl in view of Hastings teaches all the limitations of claim 24. Rangedahl further discloses a method, wherein the enabling code is specific to a particular functionality of the equipment (see col. 3, lines 44-47 and col. 4, lines 9-15).

Regarding claim 27, Rangedahl in view of Hastings teaches all the limitations of claim 20. Hastings further discloses a method, wherein the target data is encrypted (see col. 1, lines 49-50) and the service system returns a corresponding decryption key to the equipment upon said first location condition, and any other conditions set to be tested at the service system, being satisfied (see col. 1, lines 50-52).

Art Unit: 2681

Regarding claim 28, Rangedahl in view of Hastings teaches all the limitations of claim 17. Rangedahl further discloses a system, further comprising an authorization arrangement responsive to the generation of a location-match signal and successful testing for any further conditions set to be tested at the system (see col. 2, lines 21-27 and col. 4, lines 9-14), to return to the equipment enablement signals in the form of a code for enabling said functionality of the equipment (see col. 4, lines 9-15).

Regarding claim 29, Rangedahl in view of Hastings teaches all the limitations of claim 17. Rangedahl further discloses a system, further comprising an authorization arrangement responsive to the generation of a location-match signal and successful testing for any further conditions set to be tested at the system (see col. 2, lines 21-27 and col. 4, lines 9-14), is operative to return to the equipment enablement signals in the form of a decryption key for decrypting said target data (see col. 2, lines 53-62).

Regarding claim 30, Rangedahl in view of Hastings teaches all the limitations of claim 17. Rangedahl further discloses a service system, wherein the location-obtaining arrangement is operative to obtain said current-location data from a location server of a cellular radio network used by the equipment (see col. 3, lines 38-43 and col. 7, lines 20-25).

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rangedahl et al., U.S. Patent Number 5,790,074 (hereafter Rangedahl) and Hastings et al., U.S. Patent Number 6,370,629 (hereafter Hastings), as applied to claim 24 above, and further in view of Raith, U.S. Patent Number 6,711,408.

Art Unit: 2681

Regarding claim 25, the combination of Rangedahl and Hastings teaches all the limitations of claim 24. Rangedahl does not teach a method, wherein the equipment periodically checks that the identity information associated with the target data currently being used by said functionality corresponds to the identity information for which the enabling code was provided.

Raith, however teaches a method, where, in order to match the path traveled by a mobile terminal with a stored route, the mobile communication network may track the geographic location of the mobile terminal as the mobile terminal moves through the mobile communication network, preferably at periodic time intervals (see col. 7, lines 21-26) and compares the predetermined route stored in memory with the path of the mobile terminal over a predetermined distance of area (see col. 7, lines 26-29). Raith, further discloses when there is a less than a defined discrepancy between the mobile terminal and the mobile communication network, the mobile communication network validates the match and may stop monitoring the mobile terminal because the future position of the mobile terminal is expected to follow the matched route (see col. 7, lines 29-33) and if the difference between the stored route and the current path are greater than the predefined amount (see col. 7, lines 33-35), the mobile communication network will continue to monitor the mobile terminal for another predetermined distance and compared the difference again (see col. 7, lines 35-38). Raith, discloses the loop process should continue until the mobile terminal exits the geographic area of the mobile communication network (see col. 7, lines 38-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of position assisted handoff within a wireless communication network as taught by Raith, to the method of automated location verification and authorization of electronic devices of Rangedahl as modified by Hastings to include a method, wherein the equipment periodically checks that the identity information associated with the target data currently being used by said functionality corresponds to the identity information for which the enabling code was provided, thus allowing a permitted user to see only the portion of the information which is applicable to his current geographic location.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. O'Mahony, U.S. Patent Number 6,457,129 discloses a geographic location receiver based computer system security.

MacDoran et al., U.S. Patent Number 5,757,916 discloses a method and apparatus for authenticating the location of remote users of networked computing systems.

Fischer, U.S. Patent Number 5,659,617 discloses a method for providing location certificates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony S Addy whose telephone number is 703-305-8487. The examiner can normally be reached on Mon-Fri 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on 703-308-4825. The fax phone

Art Unit: 2681

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony S. Addy August 16, 2004

PATENT EXAMINER

Page 11